

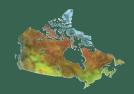


# How do you rate?

Interested in learning how your habits at home are linked with the environment?









## Take the ecoENERGY Retrofit - Homes

Questionnaire and discover how your energy choices can make a difference.

he ecoENERGY Retrofit – Homes Questionnaire is a tool designed to help you become more aware of how your home uses energy and how your energy choices affect the environment. This approach takes into account not only your home's energy consumption, but also, its impact on the surrounding infrastructures on which it relies (e.g. sewage treatment, provincial/territorial electricity capacity).

There are many small, difficultto-measure actions that you, the homeowner, can take to reduce your impact on the environment. Even small steps, when taken together with those of other homeowners, can help to protect our environment.

The first of the three parts of this questionnaire focuses on the type of appliances and equipment that you use in your home. The second part addresses conservation and environmental measures that you take as a homeowner. The third part considers the energy efficiency rating of your home that was presented by your energy advisor following your ecoENERGY pre-retrofit evaluation.

When you complete the questionnaire, check all the boxes that apply to you. Refer to the "Information and Tips" section (references 1 to 6) to help you complete the questions and to find tips on how to save energy in the home.

### Part 1 – Appliances and Equipment

	ATING, VENTILATION AND R-CONDITIONING (HVAC) EQUIPMENT
Place	a check mark in the box if
□ 1.	your home does not have air conditioning
□ 2.	your home has an ENERGY STAR® qualified ① air conditioner ② or heat pump
□ 3.	your home does not have a solid-fuel-burning appliance (such as a fireplace or a woodstove)
□ 4.	your home has a solid-fuel burning appliance 3 that has an advanced combustion system
Subto the po	tal for HVAC Equipment: (See 4 to calculate ints.)

#### (B) HOUSEHOLD APPLIANCES Part 2 - Other Options Place a check mark in the (D) CONSERVATION AND box if your home has **ENVIRONMENTAL MEASURES** ☐ 5. an ENERGY STAR qualified refrigerator or Place a check mark in the box if refrigerator-freezer (Check 12 or 13, but not both) ☐ 6. an ENERGY STAR qualified freezer, clothes washer or dishwasher ☐ 12. you have central heating that uses electronic ☐ 7. no second refrigerator/refrigerator-freezer or electronic programmable thermostats to or additional freezer (5) control the heating temperature □ 8. no dehumidifier or ceiling fan, or if you ☐ 13. you heat your house predominately with have one or more, they are ENERGY STAR electric baseboard heaters controlled by a qualified minimum of five electronic thermostats or electronic programmable thermostats that ☐ 9. at least three ENERGY STAR qualified are wall-mounted consumer electronics or home office equipment (e.g. DVD player, television, ☐ 14. you lower the heating temperature at least computer and peripherals, such as 3°C (5°F) overnight and when you are not printers and scanners) at home ☐ 15. you set your thermostats no higher than Subtotal for Household Appliances: \_ 21°C (70°F) during the heating season (See 6) to calculate the points.) ☐ 16. you routinely close curtains or blinds on sun-exposed windows during the day in (C) ENERGY-EFFICIENT LIGHTING summer to help keep the house cool, and close most curtains and blinds at night in Place a check mark in the box if winter to help keep the house warm ☐ 10. you have at least eight compact fluorescent ☐ 17. you do not have an air conditioner *or* you set light bulbs/lamps (CFLs) used in at least your thermostat to turn your air conditioner five different fixtures for general lighting on at 26°C (79°F) or higher (indoor and outdoor) ☐ 18. you routinely use cold water to wash and Note: Light-emitting diode (LED) lights can rinse your clothes replace CFLs, but night lights and seasonal ☐ 19. you use an outdoor clothesline when the string lights are ineligible weather permits ☐ 11. you use at least two lighting controls, such as motion sensors, dimmers and timers Subtotal for Energy-Efficient Lighting: $\underline{\hspace{1cm}}$ (See $\overline{O}$ to calculate the points.)

20. you use timers to delay the use of appliances until electrical off-peak periods 3	☐ 28. you do not heat your home or domestic hot water with oil, <i>or</i> , if you do, you have
21. you turn on your dishwasher only when it's fully loaded and you use the air-dry feature 9	an oil-leak detection system   29. you and others in your household use mostly alternate transportation, such as public
22. you turn off lights when you leave a room or when they are not needed	transport, carpooling, bicycling and walking  30. you recycle all recyclable materials, composi
23. you use at least one power bar with an on/off switch that you turn off when you are not using the connected appliances,	your organic kitchen waste @ and send toxic waste to a toxic waste depot (e.g. batteries, paints, pesticides)
entertainment and office devices to reduce standby losses 🔟	Subtotal for Conservation and Environmental Measures:
24. you do not use an engine block heater <b>or</b> you use a timer for the heater that is set for two hours or less	(See (5) to calculate the points.)
25. you use low-flow shower heads, low-flow/dual flush toilets  and low-flow aerators on faucets, and have repaired all water leaks	Part 3 – Energy Efficiency Rating (E) ENERGY EFFICIENCY RATING ON THE
26. you have insulated at least the first two metres of the metal hot- and cold-water pipes connected to your water heater	Subtotal for the Energy Efficiency Rating:  (See to calculate the points.)
27. you do not have a swimming pool, <i>or</i> , if you do, you use a pump timer to regulate the length of time your pool pump operates; or you use solar heating and a thermal pool blanket; or you do not heat your swimming pool	<b>Total Score</b> (Addition of subtotals A, B, C, D and E):

## **Check Your Environmental Rating**

Although many Canadians are already taking steps to conserve resources and protect the environment, most of us can do better. Find your total score in the left column of the chart below and check how you rate.

ENVIRONMENTAL SCORE RANGE	RATING	Comments
0–10	Low ✓	Time to roll up your sleeves
11–40	Marginal 🗸 🗸	Lots of opportunities
41–65	Good √√√	Still room to make a difference
66–79	Very good ✓✓✓✓	Efforts realized. Keep up the good work!
80–100	Excellent! $\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	Congratulations!

## **Information and Tips**

This section will help you to complete the questionnaire as well as provide you with tips on saving energy and resources in the home.

ENERGY STAR qualified appliances and products are among the most energy efficient in the marketplace and are considered best in their class. If the ENERGY STAR sticker is not visible, check the owner's manual or the back of the equipment. If you cannot find an ENERGY STAR logo or sticker, you can compare the annual energy consumption listed on the black-and-white EnerGuide label (or on the yellow-and-black United States EnergyGuide label) against the values of ENERGY STAR appliances in the *EnerGuide Appliance Directory*.

Typically, ENERGY STAR appliances are in the top 25 percent of energy efficiency performance. For more information, visit the ENERGY STAR Web site at www.energystar.gc.ca. To obtain a copy of the *EnerGuide Appliance Directory*, call 1-800-O-Canada (1-800-622-6232).

ENERGY STAR qualified air conditioners include conventional central-air systems and all window, wall or multi/mini split air conditioners. Heat pumps include air-source, water-source and ground-source heat pump systems.

Solid-fuel-burning appliances are fireplaces and stoves that burn wood, pellets, corn and other grains and seeds. Those with advanced combustion technology have highly efficient combustion systems that re-burn combustion gases before they leave the appliance. Highly efficient combustion systems are certified as CSA-B415.1 or EPA, 40 CFR Part 60, and they include firebox insulation to keep temperatures high; preheated primary combustion and secondary air that is fed to the fire through sets of small holes above and behind the fuel bed; and internal baffles that give the fuel gases a long and hot enough route so that the gases can burn completely.



Based on statements 1 to 4, tabulate your sub-score.

Number of Boxes Checked	Points
Two	10
One	5

Extra refrigerators and freezers can cost more than \$10 a month in electricity. If you need a second refrigerator or freezer, keep its coils and air inlets clean; ensure the door seals are tight; keep it defrosted; and keep it full but not overloaded. Better still, buy the correct size ENERGY STAR qualified refrigerator or freezer for your needs: they are 40 percent less energy when compared with one built in the 1970s.) Unplug these extra appliances when not in use.



Based on statements 5 to 9, tabulate your sub-score.

Number of Boxes Checked	Points
Four to five	20
Three	15
Two	10
One	5



Based on statements 10 and 11, tabulate your sub-score.

Number of Boxes Checked	Points
Two	10
One	5

Electrical peak-load reduction can be good for homeowners and the environment. Reducing electrical power consumption during peak hours can lower energy bills where "time of use" metering is available. It restores grid operating margins that prevent brownouts and blackouts, reduces demand on non-renewable and dirty fuel sources, delays or avoids construction of new electrical generating plants and reduces greenhouse gas and pollution emissions.

Simple actions that homeowners can take include using timers to delay use of heating/cooling equipment and appliances, such as clothes washers and dishwashers, to times outside electrical peak periods. (Typically, peak periods are weekdays from 7 to 11 a.m. and 5 to 10 p.m.)

A relatively common assumption is that washing dishes by hand saves hot water. However, washing dishes by hand several times a day could be more expensive than operating a fully-loaded automatic dishwasher. An ENERGY STAR qualified dishwasher may consume less energy due to "smart sensors" that adjust the wash cycle, rinse volume and the amount of water to match the load. ENERGY STAR qualified dishwashers also typically use only 13 to 27 litres of hot water compared to older appliances that use from 30 to 53 litres. A built-in booster water heater with a manual selector switch can raise the water temperature at least 20 degrees for less than it costs to keep the water heater temperature that high.

Many electric and electronic devices consume electricity even when switched off. Typically, these units include remote or soft-touch controls, monitors, clocks, electronic timers and LED lights. When power bars are switched off, electronic devices are still protected from power surges. However, keep in mind that some recording devices, such as video and DVD players, may lose their programming set-up if switched off by a power bar. Remember to switch off power bars during extended periods of non-use, such as during vacations.

Over 30 percent of indoor residential water consumption is a result of toilet use. In a recent study, dual-flush toilets saved approximately 26 percent more water than conventional 6-litre toilets when used to replace existing non-efficient toilets that averaged 14 litres. Consideration of other toilet water conserving methods such as water displacement devices can help conserve water while reducing waste treatment costs.

To reduce heat loss, insulate at least the first 2 metres of the metal hot- and cold-water lines from the hot-water heater, especially if they run through unheated areas, such as basements and crawl spaces. Insulation can save about 2 percent on heating bills and can reduce pipe-sweating problems in the summer. Do not place pipe-wrap insulation within 15 centimetres of exhaust vents at the top of gas- or oil-fired water heaters. Insulate plastic pipes only with an approved type of insulation, to avoid damaging plastic pipes and fittings.

If you will be away from your home for 3 days or more, remember to switch off or turn down your water heater thermostat to a minimum setting (e.g. vacation setting). For more energy-saving tips, read the user's manual for your home's water heater.

You can protect your home and property from oil leaks by using double-wall or plastic-lined oil tanks, non-metallic oil tanks, and tank and burner drip trays that have leak detection alarms.

If you cannot compost your kitchen waste because you do not have enough yard space or access to a communal composter, score this question just based on recycling. Use of curb-side recycling programs (e.g. paper, glass, metals and organics) or use of recycling centres helps to reduce landfill loads while allowing the re-use of these materials for other purposes. Never dispose of toxic waste (e.g. batteries, paints, solvents, unused medication, CFLs, pesticides and herbicides) in regular garbage, a composter or down a drain. Instead, send them to your local recycling centre or toxic waste depot. Send unused medications to a pharmacist.

Based on statements 12 to 30, tabulate your sub-score.

Number of Boxes Checked	Points
Fifteen to eighteen	40
Eleven to fourteen	30
Seven to ten	20
Four to six	10
One to three	5

The energy efficiency rating considers the existing insulation levels of all building components, type and efficiency of mechanical systems (space heating, water heating and ventilation equipment), and air-tightness levels. Based on the energy efficiency rating on your EnerGuide label, the following points are assigned.

ENERGY EFFICIENCY RATING	Points
0 to 40	0
41 to 60	5
61 to 70	8
71 to 75	14
76 to 79	17
80 or higher	20